

REMARKS/ARGUMENTS

In the Office Action mailed May 4, 2004, claims 1-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,230,064 issued to Nakase et al. ("Nakase") in view of U.S. Patent No. 6,496,817 issued to Whang et al. ("Whang").

Claims 1-11 and 13-32 remain in this application. Claims 1, 11, 13, and 23 have been amended. Claim 12 has been cancelled.

The applicant respectfully submits that the present invention is not obvious over Nakase in view of Whang because the combination of Nakase and Whang suggested by the Examiner still does not disclose all of the claimed elements of the present invention.

The present invention, for example, according to claim 1, requires generating time labels by processing input data comprising informational data and corresponding time labels. The remaining steps of claim 1 recite processing steps done on the time label portion of the input data. The combination of Nakase and Whang does not disclose or suggest processing done on the time label portion of the input data. Rather, the combination of Nakase and Whang only teaches processing of the equivalent of the informational data portion of the input data.

In addition, the present invention, for example, according to claim 1, requires generating multi-level time labels from the time labels that are stored in the multi-level data structure, each multi-level time label comprising a plurality of rows of time labels. The combination of Nakase and Whang does not disclose or suggest multi-level time label comprising a plurality of rows of time labels.

In particular, Nakase discloses generating time series database that stores a plurality of time series data that consist of time-serially arranged values of variables for

one item (event object) (col. 4, line 65 to col. 5, line 1). The time series data are the values of the item at particular times, not the corresponding times that are associated with each value. Nakase does not disclose or suggest processing done on the time label portion of the input data. Nakase discloses extracting time series data from the database by processing the time series data by generating vectors from the data by finding minimum and maximum points in the values of the item, and then finding the times associated with each vector. (col. 5, lines 35-67) The vectors are then posted on the graph or chart, along with single level time labels. (Fig. 3) Nakase does not disclose or suggest multi-level time labels comprising a plurality of rows of time labels.

Whang discloses providing a subsequence matching method in time-series databases containing indexing time-series data as sequences data representing values at specific time points. (col. 1, lines 15-18, col. 4, lines 1-7) Thus, Whang discloses processing the values at the time points, not time labels corresponding to the time points, as required by the present invention. This is further shown by the disclosure of the building process to create the time series and matching process to find the time series by using the multidimensional indexes and time series database (col. 4, lines 28-67 and col. 5, lines 1-8; also see figs 3 and 4 and col. 7, lines 36-62). Further, Whang does not disclose or suggest multi-level time labels comprising a plurality of rows of time labels.

Thus, the combination of Nakase and Whang does not disclose or suggest processing done on the time label portion of the input data. Likewise, the combination of Nakase and Whang does not disclose or suggest multi-level time labels comprising a plurality of rows of time labels.

Therefore, the present invention according to claim 1, and according to claims 11, 13, and 23, which are similar to claim 1, as well as claims 2-10, 14-22, and 24-32, which depend therefrom, are not unpatentable over Nakase in view of Whang.

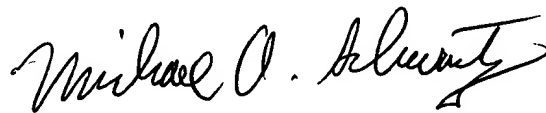
Conclusion

In view of the foregoing, all of the Examiner's rejections to the claims are believed to be overcome. The Applicants respectfully request reconsideration and issuance of a Notice of Allowance for all the claims remaining in the application. Should the Examiner feel further communication would facilitate prosecution, he is urged to call the undersigned at the phone number provided below.

Additional Fees:

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with this application to Deposit Account No. 19-5127 (19111.0013).

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Michael A. Schwartz". The signature is fluid and cursive, with a large, stylized "S" at the end.

Michael A. Schwartz
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Dated: November 4, 2004

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